

## REVIEWS

**North American Flora\***

About ten years ago it was proposed to publish under the title "Systematic Botany of North America" a descriptive account of all plants growing without cultivation in North America, north of Mexico. As originally planned, the work was to consist of seventeen volumes, eight of which were to be devoted to the Angiosperms. The different families of plants were assigned to specialists for elaboration, and the following botanists constituted the board of editors: Professors Atkinson, Britton, Coulter, Greene, Halsted and Underwood, and Messrs. Coville and Hollick. For some reason no part of this work ever reached publication, with the exception of a short pamphlet on the Hepaticae by Professor Underwood, in which the species of the single genus *Riccia* were described.

Recently, however, it has become possible for the New York Botanical Garden to assume responsibility for this important undertaking and to carry it on in a somewhat more extended sense than was originally intended. The title has been changed to "North American Flora," and the region treated will include not only the whole of the North American continent, north of Colombia, but also the majority of the West Indian islands. The new publication will be edited by Professors Underwood and Britton and will consist of thirty volumes. Thirteen of these will be devoted to the Thallophytes, two to the Bryophytes, one to the Pteridophytes and Gymnosperms, and the remainder to the Angiosperms. The parts will be issued as rapidly as possible, and different volumes will be in course of publication at the same time.

The part that has just appeared may serve to indicate the plan of the whole work and treatment which the various groups are to receive, although it is possible that this treatment will have to be more or less modified in the case of some of the lower cryp-

\*North American Flora, 22 : 1-80. Rosales, by J. K. Small; Podostemonaceae, by G. V. Nash; Crassulaceae, by N. L. Britton and J. N. Rose; Penthoraceae and Parnassiaceae, by P. A. Rydberg. The New York Botanical Garden, 22 My 1905.

togams. After a general account of the Rosales, with an analytical key to the twenty four families included in this order, the genera and species in four of these families are described. The Podostemonaceae are represented by 5 genera with 10 species, the Crassulaceae by 25 genera with 284 species, 30 of which are new, the Penthoraceae by a single genus with one species, and the Parnassiaceae by a single genus with 13 species, 4 of which are new. Under the Crassulaceae, 4 new genera are proposed, and many other recently proposed genera are recognized. An important feature of the work is found in the analytical keys, each genus (unless represented by a single species) having a key to the species and each family a key to the genera.

As a rule the descriptions, both generic and specific, are concise. Under each genus the description is supplemented by an enumeration of the synonyms and the name of the type species. Under each species, in addition to a full synonymy, the type locality and the geographical distribution are described, and references are given to all published illustrations. In the case of a new species, the type locality is described more fully, the name of the collector and the date of collection being added. In most cases, however, no reference is made to the time of flowering or fruiting. It should also be noted that very few of the descriptions are accompanied by critical remarks, these being rendered unnecessary by the numerous keys.

Perhaps the feature of the work which will be most criticized is its strong tendency toward the segregation of large and comprehensive genera into smaller and more rigidly defined genera. A similar tendency is also to be observed in the limitation of species. Both of these tendencies are especially well seen in the treatment of the Crassulaceae. It should be remembered, however, that the descriptions in this difficult family are nearly all drawn from living specimens, and that the segregations are therefore based upon a very intimate knowledge of the plants.

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